

**MINUTES
of the
JOINT MEETING
of
LOS ALAMOS NATIONAL LABORATORY OVERSIGHT COMMITTEE
and
RADIOACTIVE AND HAZARDOUS MATERIALS COMMITTEE**

**August 27, 2007
Room 203, Main Conference Center, Los Alamos Research Park
Los Alamos**

The joint committee meeting of the Los Alamos National Laboratory (LANL) Oversight Committee and the Radioactive and Hazardous Materials Committee (RHMC) was called to order at 10:10 a.m. on August 27, 2007, by Representative John A. Heaton, RHMC chair.

Los Alamos National Laboratory Oversight Committee

Present

Rep. Roberto "Bobby" J. Gonzales,
Co-Chair
Rep. Thomas A. Anderson
Sen. Richard C. Martinez
Rep. Debbie A. Rodella

Absent

Sen. Phil A. Griego, Co-Chair
Sen. John T.L. Grubesic
Sen. William H. Payne
Rep. Jane E. Powdrell-Culbert
Rep. Nick L. Salazar
Sen. William E. Sharer

Advisory Members

Sen. Dianna J. Duran
Rep. Ben Lujan
Rep. Jeannette O. Wallace

Sen. Ben D. Altamirano
Sen. Mary Jane M. Garcia

Radioactive and Hazardous Materials Committee

Present

Rep. John A. Heaton, Chair
Sen. Richard C. Martinez, Vice Chair
Sen. Vernon D. Asbill
Rep. William J. Gray
Sen. Gay G. Kernan
Sen Carroll H. Leavell
Rep. Antonio Lujan
Rep. Jim R. Trujillo
Rep. Jeannette O. Wallace

Absent

Sen. John T.L. Grubesic
Rep. Manuel G. Herrera

Advisory Members

Rep. Thomas A. Anderson
Rep. Donald E. Bratton
Sen. Rod Adair

Sen. Mary Jane M. Garcia
Sen. John Pinto

Sen. William H. Payne
Rep. Nick L. Salazar
Rep. Jeff Steinborn
Rep. Peter Wirth

Staff

Gordon Meeks
Evan Blackstone
Aldis Philipbar

Guests

The guest list is in the original meeting file.

Monday, August 27

Committee Business

Representative Heaton began the meeting by welcoming everyone and having committee members and staff introduce themselves to the audience. Representative Heaton went on to explain the charge of the RHMC. Representative Gonzales then explained the role of the LANL Oversight Committee. Jim West, chair of the Los Alamos County Council, also welcomed the committee. Representative Heaton stated that LANL is the crown jewel of New Mexico and that the committee is very concerned about the current reputation of LANL. He said the legislature should do everything in its power to help develop a strategy to move LANL forward and to help change LANL's reputation.

Environmental Program Overview and Update on Consent Order Compliance: LANL

Susan G. Stiger, associate director for environmental programs at LANL, informed the committees that her primary responsibilities at LANL are waste management and cleanup activities at the lab. Ms. Stiger explained that she has been at LANL for four months and has previous experience at the Department of Energy's (DOE) Rocky Flats site, Hanford site and the Idaho National Laboratory. However, she stated, the complex and compact sites at LANL, coupled with an ongoing mission, make it a more difficult challenge. Ms. Stiger explained that the objective of LANL is to clean up the lab to levels defined by regulations and the federal consent order. She pointed out that the lab is working toward that objective by conducting its work safely and in compliance with requirements; by managing waste and program activities so that no new cleanup liabilities are created; and by improving efficiency and effectiveness.

Ms. Stiger went on to provide an assessment of LANL's cleanup program. She pointed out that the consent order provides a robust framework for cleanup at LANL. However, the consent order is young, and the lab is still investigating sites for cleanup. She stated that the lab can build upon successful cleanup experience elsewhere, especially in determining when enough is known to proceed with cleanup. Currently, LANL is at a critical transition between understanding the contamination and moving toward increased cleanup. Five to six decisions on cleanup will be presented for public review and comment in the next few years, and there will be

a transition in the types of skills required both for subcontractors and LANL personnel. At that point, Ms. Stiger said, progress will be more evident. Ms. Stiger emphasized that cleanup at LANL is unique because the aquifer is 800 to 1,000 feet below the surface at LANL and the hydrogeology is extremely complex. She stated that LANL continues to enhance its ground water monitoring and sampling programs. Finally, Ms. Stiger informed the committee that LANL's efforts to improve business practices will support an efficient cleanup program.

Ms. Stiger then updated the committees on LANL's progress in complying with the consent order. She reiterated that LANL's commitment is 100 percent compliance with the consent order. However, she stated that LANL's relationships with its stakeholders and regulators is not what it should be. Ms. Stiger pointed out that communicating effectively with the New Mexico Department of Environment (NMED) is essential to ensure that both the letter and the spirit of the consent order are met, and that more frequent and more constructive discussions are essential. She explained that LANL needs to improve transparency and credibility and work hard to achieve trust with stakeholders, regulators and members of the public. One way of achieving this goal is by increasing external reviews of LANL's programs and data. In the end, Ms. Stiger informed the committees, the ultimate measure is LANL's performance, and the lab has a commitment to execution and a willingness to tackle the challenges that arise. In conclusion, Ms. Stiger summarized some of the impending cleanup activities taking place next spring; cleanup of Material Disposal Area (MDA)-V and MDA-B; and cleanup of Area G (legacy sites).

Questions and comments included:

- where the material from cleanup activities is disposed;
- schedule of dates and the time line for the consent order;
- depth and complexity of the aquifer and how they affect cleanup;
- what components of the consent agreement have not been yet met and what is the status;
- Rocky Flats as the model for cleanup and required funding commitment;
- request for budgets from LANL from now to 2015 that would meet cleanup needs;
- how federal budget cuts are affecting abilities for cleanup;
- quantifying the levels of contamination;
- causes for missed compliance with the consent order;
- more effective characterization of the ground water parameters;
- Weldon Springs, Missouri, as a cleanup project model;
- budgets for LANL and for NMED related to cleanup; and
- LANL's standards for determining the ultimate use of the sites that are now contaminated after they are cleaned up.

Update on Consent Order Compliance NMED

James Bearzi, Hazardous Waste Bureau chief for NMED, provided the committees with an update on LANL's compliance to date with the federal consent order. He began by describing the scope and history of the consent order. It began in 2002, when NMED issued a finding of imminent and substantial endangerment, and culminated in 2005, when the parties signed the

final compliance order. Mr. Bearzi explained that the consent order represents a commitment to New Mexico. Its scope is geographically huge because it covers the surface, subsurface and ground and surface waters on the lab's entire property; however, the order only addresses chemical constituents, not radionuclides, which are under federal government jurisdiction. The consent order also does not address operations, but does provide for investigations, cleanup and land transfers. Mr. Bearzi went on to explain that the order accelerates the pace of investigation and cleanup, prioritizes and focuses the activities, provides for reporting and investigation requirements, provides for adequate cleanup standards and provides schedules for cleanup and remedies. LANL currently has over 1,000 contaminated sites with varying degrees of contamination. Over 80 different pollutants have been discovered in the ground water, which is significant because the city and surrounding communities depend on the aquifer.

Mr. Bearzi described the schedule and document submittals required by the consent order and updated the committee on LANL's compliance record. He stated that LANL has a mixed record of success. The lab has done much to ramp up the pace of cleanup, it has reduced the number of unsolicited superfluous documents and has begun to agree that there are serious deficiencies in its ground water monitoring program. On the other hand, Mr. Bearzi pointed out, some work and documents submitted by LANL meet only minimum requirements or less and the lab is behind on remedy selections and has been subject to various enforcement actions. Furthermore, Mr. Bearzi stated, LANL's ground water monitoring network is woefully deficient. Mr. Bearzi acknowledged that LANL is behind on remedy selections primarily because it does not know enough about the groundwater contamination, and the complexity of the geology in the area makes cleanup difficult.

Finally, Mr. Bearzi reviewed the state's performance record with regard to the consent order's requirements. He stated that the NMED has not missed a notice date since October 2006 and NMED's technical staff is providing valuable guidance on LANL's ground water program and the remedy targets. The Legislative Finance Committee has given the NMED mixed reviews on its performance. Mr. Bearzi concluded by emphasizing that the state needs to conduct timely and appropriate enforcement, provide timely and technically sound feedback and needs to involve the public.

Questions and comments included:

- concerns about the state not meeting consent order deadlines and whether it has an adequate budget to meet its responsibilities;
- the effect of budget on staffing and the ability to meet work requirements with \$1.1 million and with 10 full-time employees (FTEs);
- a request for a scorecard that depicts work tasks and work accomplishments relative to a schedule;
- seismic issues relative to volcanism of the mountain; and
- a number of requests for information from activist groups.

On a motion made, seconded and unanimously approved, the minutes of the June 12, 2007 RHMC meeting and the minutes of the July 27, 2007 LANL Oversight Committee meeting

were approved as submitted.

LANL Ground Water Protection Program

Danny Katzman, Water Stewardship Program manager at LANL, provided the committees with an overview of LANL's ground water and surface water monitoring project as well as an update on chromium contamination from LANL activities. Mr. Katzman informed the committees that the monitoring project is a comprehensive program implemented under the consent order. The project includes 82 shallow alluvial wells, 24 perched intermediate wells, 37 regional aquifer wells and 52 springs. The monitoring objectives of the project are protection of water supply wells, area-specific characterization and area-specific monitoring for corrective measures and facility operations.

Mr. Katzman provided the committees with a map of the locations of the wells and outlined some changes to the monitoring-well network. He explained that area-specific monitoring-well network evaluations are being conducted pursuant to an NMED requirement issued in April 2007. Mr. Katzman stated that the evaluations will result in recommendations to the NMED for upgrades to the monitoring-well network. The NMED is not in a good place to make high-quality decisions about cleanup unless the lab has its monitoring wells in good, reliable condition. These network upgrades, Mr. Katzman emphasized, are important critical paths toward timely completion of the consent order. Furthermore, LANL has set an aggressive schedule of improving the monitoring network over the next one and one-half years.

Mr. Katzman went on to give the committees an update on chromium contamination. He explained that chromium was used as a corrosion inhibitor in the power plant cooling towers in Sandia Canyon from 1956 to approximately 1972. It is estimated that a total of between 69,000 and 160,000 pounds of chromium was released through daily discharges into Sandia Canyon. LANL is currently working with Los Alamos County and the City of Santa Fe to ensure that adequate monitoring is being conducted at water supply wells. Mr. Katzman emphasized that, in September 2007, three major reports will be issued that hopefully will complete the investigative phase that will lead to long-term decisions about cleanup.

Questions and comments included:

- fiscal year 2008 LANL budget for ground water monitoring;
- the number of new wells being drilled each year and final number of new wells;
- the nature of drilling fluids used in drilling monitoring wells that may affect quality of ground water;
- the potential for using some of the same cleanup techniques in production wells that are used in the monitoring wells;
- explanation for the costs of drilling wells in the Jemez Mountain environment; and
- location of measurements of radionuclides downriver.

Mr. Katzman explained that there is a background level of chromium and that during the 1950s and 1960s, chromium was released from power plant cooling towers in Sandia Canyon. Between 70,000 pounds and 160,000 pounds were released into the canyon. He showed the

locations and extent of contamination in wells and presented some graphics depicting the extent of contamination, maps, cross-sections and geologic formations affected by the releases. The NMED requires a final investigation report of the extent and form of the chromium contamination and cleanup requirements by September 2008.

Questions:

- variables that affect the drilling cost of different kinds of wells;
- the status of the power plant that was the source of the chromium contamination;
- the speed of the movement of the contamination plume (a couple of meters per day of the ground water flow);
- how long before it reaches the Rio Grande;
- epidemiological studies of health effects in nearby communities;
- how long municipalities have been looking for chromium and the potential for chromium already to have moved through the ground water systems;
- loss of well bore integrity;
- cooperation and communication with the municipal authority and the public works people; and
- the distance between the known contamination and the drinking water production well.

Status of the Waste Isolation Pilot Program (WIPP) Shipments

Gerald O'Leary, Transuranic (TRU) Waste Disposition Program director at LANL, informed the committees that the mission of the program is to accelerate the retrieval, characterization and shipment of approximately 60,000 drum equivalents of TRU waste from LANL to WIPP. He reviewed the TRU waste operations at Area G and summarized LANL's TRU waste inventory. Mr. O'Leary also summarized the TRU waste disposition process and pointed out that LANL has transferred the prescreening process to Washington TRU Solutions. In 2007, Mr. O'Leary pointed out, 2,385 containers were shipped to WIPP as compared to 2,499 in all of 2006. Mr. O'Leary emphasized that the Carlsbad field office and Washington TRU Solutions' central characterization program have prioritized shipments of high-activity drums.

Mr. O'Leary said that LANL's major challenge is overcoming the 70 percent rejection rate during prescreening of drums from the Area G inventory, which requires remediation and repackaging. Consequently, LANL is enhancing its TRU waste packaging capabilities so that packages will not include prohibited items and will qualify for storage at WIPP. He went on to state that LANL will start shipments of remotely handled TRU waste in October 2007. In conclusion, Mr. O'Leary summarized that LANL's challenges include an aggressive completion schedule, the operational capability and availability of facilities and sequencing the retrieval, characterization, shipping and environmental restoration activities.

Questions:

- disposal of material after repackaging;
- what is stored at pad 10 in Area G;
- the nature of prohibited items in containers;

- the rate of shipments and an acceleration plan that takes into account WIPP's closure; and
- the need to ship 4,000 to 5,000 drums of TRU waste per year and the need for more repackaging facilities.

Sandia National Laboratories (SNL) Consent Order Status

Mr. Bearzi provided the committees with an update on SNL's compliance to date with a federal consent order. It began in 2002 when the NMED issued a finding of imminent and substantial endangerment and culminated in 2004 when the parties signed the final compliance order. Much like the consent order for LANL, the consent order for cleanup at SNL covers the surface, subsurface and ground and surface waters on the lab's entire property; however, the order only addresses chemical constituents, not radionuclides, which are under federal government jurisdiction. The consent order also does not address operations, but does provide for investigations and cleanup. Mr. Bearzi reported that SNL is nearing the end of its cleanup work, and there are four remaining ground water sites and one mixed waste landfill site. Mr. Bearzi highlighted SNL's time line under the order and explained the length of time required for decisions and implementation. He also pointed out how much delay is inherent in the process of these cleanups and the demands they place on state resources. He stated that SNL is doing well, but that progress continues to be problematic, primarily due to SNL's continued refusal to implement a LANL-style voluntary fee agreement to support the NMED staff hours dedicated to SNL. In addition, Mr. Bearzi noted, his bureau has allocated significant staff time to respond to an unusual number of requests for information from activist groups.

Fran Nimick, deputy director for Center 6700 at SNL, provided the committees with an update on SNL's consent order compliance. With regard to solid waste management units and areas of concern, Mr. Nimick stated that the mixed waste landfill is the only remaining site. Two of three corrective measure evaluation plans for ground water areas are in review at the NMED, and all required monitoring and reporting for perchlorate screening of ground water is on schedule or completed. Only four deliverables remain under the order, and all other deliverables have been submitted on or ahead of schedule.

Questions and comments included:

- an explanation for delays by the NMED in responding to SNL's response to a notice of disapproval;
- a budget for the NMED to oversee SNL's cleanup;
- problems caused by turnover of key staff;
- transfer of money from other cleanup efforts after closure to needed projects elsewhere;
- refutable evidence of ground water contamination for permitted facilities in Bernalillo County; and
- reaching closure of public hearings and the need for decisions based on science.

Federal Resource Conservation and Recovery Act (RCRA) Permit Update

Mr. Bearzi provided the committees with an update on the RCRA permits and permitting

process for LANL and SNL. New draft permits have been released for public comment, and Mr. Bearzi delivered two copies to DOE and LANL officials in front of the committees. He explained the RCRA law and the role of the states under the program. RCRA addresses disposal of hazardous waste, and it defines technical standards for treatment of hazardous waste, storage and disposal. Under the RCRA permitting process, the proper state authority issues a draft permit, there is a public hearing and the proper state authority then issues a final permit. Mr. Bearzi pointed out that the NMED's permitting process requires the NMED to meet with stakeholders that are in opposition to the permit and to try to negotiate and revise the permit accordingly. The RCRA permitting process includes a public comment period on a draft permit, meeting with stakeholders, issuing a revised draft permit for public comment, conducting a public hearing on a narrow scope of issues and issuing a final permit.

Mr. Bearzi went on to point out that RCRA applies to LANL and SNL because they generate hazardous waste. LANL and SNL activities covered by RCRA include hazardous waste generation, storage, treatment, disposal, corrective action and public participation. Mr. Bearzi explained that RCRA's permitting goals include sound waste management practices, integration with consent orders and clear schedules. Finally, Victoria George, Environmental Protection Division leader at LANL, informed the committee that LANL is working with the NMED to ensure it receives all necessary information for the RCRA permit and that LANL is just beginning evaluation of the draft permit.

Questions and comments included:

- the status of Cannon, Holloman and Kirtland Air Force bases under RCRA;
- how RCRA permitting has changed over the years; and
- how states vary in their administration of RCRA.

On a motion made by Representative Heaton, seconded and unanimously approved, the committees directed staff to draft a letter on behalf of the committees to DOE, New Mexico's congressional delegation and the U.S. secretary of energy, requesting them to provide LANL \$15 million in fiscal year 2008 and \$15 million in fiscal year 2009 to fund ground water monitoring at LANL.

LANL and Northern New Mexico's Economy

Joseph Maestas, mayor of Espanola, explained to the committees how LANL budget cuts as proposed in the U.S. House of Representatives version of the federal budget will affect LANL's community commitment plan. He stated that the City of Espanola, and all of northern New Mexico, are concerned about the budget cuts and that the city opposes the budget cuts. Mayor Maestas went on to call for a more gradual transition of LANL's mission in order to help mitigate job cuts. He also called for the governor and state legislature to cooperate with the cities and communities affected by the cuts in order to mitigate their effects. Mayor Maestas proposed a partnership between New Mexico's local governments, THINK New Mexico and state and federal governments to address the negative effects of LANL budget cuts on communities in northern New Mexico.

Questions and comments included:

- compliments to the mayor and to LANL;
- a need for regional collaboration;
- the budget for LANL in 1990 compared to the current proposed budget;
- the need to reduce northern New Mexico's reliance on LANL for its economy;
- gross receipts tax paid by LANL and exemptions for LANL's out-of-state contracts;
and
- the need for cooperation and communication among the local communities.

There being no further business, the committees adjourned at 4:08 p.m.